BCA-103

B.C.A. First Year Examination, 2017

Paper–III

(Problem Solving Through C Programming)

Time Allowed : Three Hours

Maximum Marks : 100

PART–A (खण्ड-अ)   [Marks : 20

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं। प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART–B (खण्ड-ब)   [Marks : 50

Answer **five** questions (250 words each), selecting **one** from each Unit. All questions carry equal marks.

प्रत्येक इकाई में से **एक-एक** प्रश्न चुनते हुए, कुल **पाँच** प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART-A

1. Answer the following questions :

    (i)   Define Algorithm.

    (ii)   What is meant by Syntax error?

    (iii)   Differentiate between constant and variables.

    (iv)   Where the bit wise operators are used?

    (v)   Differentiate between Break and Continue statement.

    (vi)   Define control variable.

    (vii)   What is meant by Scope of a function?

    (viii) Differentiate between Local and Global variables.

    (ix)   What is the use of Static variables?

    (x)   Define Arrays.   10×2=20

PART-B

UNIT-I

2. What is meant by algorithm? Discuss the properties of algorithm. Also write on algorithm to find the area of a triangle. **10**

3. What is Flow chart? Draw a Flow chart to find the highest number among N natural number. **10**

UNIT-II

4. Discuss the keywords and data types in C. **10**

5. Explain a brief overview of Basics of C Language. **10**

UNIT-III

6. What is meant by while Loop? Write a program to print First N prime numbers. **10**

7. Explain the working of switch case with a example. **10**

UNIT-IV

8. What is meant by Function? Why function is needed? Discuss the various categories of function with respect to parameter passing. **10**

9. Write a C program using function to find the lowest number among an array having N elements. **10**

UNIT-V

10. Explain various file handling operations with example. **10**

11. Write a program in C to compute the multiplication of two matrix of M by N order. **10**

PART-C

12. (a) Write a note on various Flow chart symbols.

    (b) Discuss different kinds of error. **10+5=15**

13. Explain different kinds of operators in C. **15**

14. (a) Explain the working of For Control structure with example.

    (b) How the do-while is different than while? Explain with example. **8+7=15**

15. Write short notes on the following :

    (i) Call by value and call by reference.

    (ii) Recursive Functions.

    (iii) Actual and Formal Parameters. **5+5+5=15**

16. (a) Explain structure handling with example.

    (b) Discuss various kinds of variables. **10+5=15**

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